

Testimony for Energy & Technology Committee

March 3, 2022,

Roger Kuhns, Mystic, CT

Thank you very much for your time and this opportunity to speak.

Senate Bill #176, An Act Concerning Shared Clean Energy Facilities, does not go nearly far enough to aggressively increase solar power in all situations in the state of Connecticut. We are in a climate emergency, and must act in response to this emergency. Currently, there are severe restrictions on solar installation, and this bill begins to address some of that.

If we do not “free up access and ability to install solar everywhere” we will never meet the states Greenhouse gas emissions reduction goals - it is simply impossible.

We can no longer have restrictions on the megawatts size of new generation projects. Limiting solar development is counter productive to the state’s GHG emissions reduction and zero-carbon grid goals (sec. (c)(1)(A) lines 85-106.

The cap should be increase to 100MW or more, not the 50MW in the bill. Similarly the cap on Shared Clean Energy Facilities must also be raised to over 50MW (line 94). On solar power - ideally - we should have not caps.

We can not support wide development of anaerobic digesters for production of methane - this fortifies the ever-increasing natural gas infrastructure, continues to build reliance on biogas/ natural gas as a fuel, and works directly against Connecticut’s GHG emissions reduction goals. Biogas should be used on-site of generation for local only use.

The “Financing mechanisms” created for incentives - section (G)(H) lines 77-78 is vague - but should only allow investments, if any, in zero-carbon energy sources and products.

Good parts of the bill include:

1. Shared clean energy facilities are good, and portion stating the “entire rooftop space” can be developed [(sect. (g) line 114-119] is good. This can be further supported by zero-carbon emissions microgrid installation allowances for business parks, parking lot areas, university and medical complexes, large industrial centers, and towns.
2. A recognition and focus on low income customers is very good.
3. Allowing electric distribution companies to own solar power generation facilities is fine, but private sector installment must not have limits. The power distribution companies must flex their strategies to the reality of what is needed in this climate emergency, rather than the state limiting private sector opportunities to retain historic monopolies or controls.

HB 5200 - An Act Establishing a Task Force to Study Hydrogen Power. Supportive with additions and clarifications. There is a tremendous body of data on this - and it is clear that **Green Hydrogen** - that produced using electrolysis of water - should and must be the only acceptable source (Pink Hydrogen is produced using the electrolysis of water and excess nuclear power). “**Blue Hydrogen**” is produced by cracking the methane molecule CH₄ in natural gas, of which most is from fracked sources and has a carbon footprint 20 percent higher than just burning the gas. Green hydrogen only - please. If you do this study you need

an economic geologist or geologic engineer on the task force to ensure understanding of natural resources sources, life cycles, reserves, and impacts.

HB5202 - An Act Exempting Existing Nuclear Power Generating Facilities in the State from the Nuclear Power Facility Construction Moratorium. Supportive with additions and clarifications. I would strongly suggest that language addressing thorium-based reactor preferences be added. Thorium reactors are safer - thorium is not fissile (does not split and explode easily) on its own so the reactions can be stopped quickly, which means the reactors can be shut down more easily, and do not require the extreme pressures of uranium reactors. There is also much less waste from thorium reactors, and it is less radioactive and shorter lived.

HB5203 - An Act Concerning Utility Company Cost-Sharing Mechanisms. - I support giving PURA more oversight and decision making in this proposed bill.

SB 177 - An Act Concerning Grid Resilience. Asking for further study.

HB5198 - An Act Requiring the Study of the Use of Technology in the State. Asking for further study.

Roger Kuhns, PhD (Economic Geology)
CT State Coordinator for Citizens' Climate Lobby
CT Small Business Owner: SustainAudit, LLC
Mystic, CT 06355
(860) 910-8525
rogerjameskuhns@gmail.com